

Flint, Michigan, Drinking Water

FEBRUARY 27, 2017

SUMMARY

Since **January 2016**, EPA has provided assistance to support state and local response efforts related to high levels of lead found in drinking water in Flint, Mich. After months of federal involvement — which included an emergency declaration signed by the President, issuance of an imminent and substantial endangerment order, direct sampling, and other technical assistance — there has been significant improvement in the quality of water delivered to Flint residents. Based on recent rounds of sampling, the water in Flint is similar to that in many other American cities dealing with aging, oversized infrastructure and lead service lines.

CURRENT STATUS AND ISSUES

- ❑ **Lead and Water Quality:** In coordination with state, local, and third-party experts, EPA has determined Flint's water quality continues to improve. Lead levels are now below the federal action level. In addition, orthophosphate is restoring the protective coating in pipes. Chlorine levels have improved and stabilized throughout the system for effective disinfection. Disinfection byproducts are under control and remain well below regulatory levels.
- ❑ **EPA's Emergency Order and New Water Source Selection:** By October 2017, the City plans to switch water sources and start treating raw water from a different source, Karegnondi Water Authority. EPA is utilizing its emergency order to ensure the state provides robust regulatory oversight and technical support. The city must ensure community members are fully informed. Currently, the city and state are conducting a water source cost alternatives analysis that could lead to a change in the proposed water source.
- ❑ **WIIN Act Funding / State Revolving Loan Fund:** The Water Infrastructure Improvements for the Nation (WIIN) Act set aside \$100 million for the Drinking Water State Revolving Loan Fund to deliver supplemental funds to eligible recipients. Flint and the State of Michigan are currently the only eligible recipients. Flint has submitted an intended use plan for the full \$100 million. EPA approval is expected by mid-March 2017. Once approved, Flint can begin lead service line removal work and infrastructure upgrades.
- ❑ **Point-of-Use Filters:** EPA advises Flint residents not to drink unfiltered water if they have a lead service line. EPA has determined that these filters are protective of public health for lead if used according to manufacturer's recommendations.
- ❑ **Bottled Water & Expiring Water Credits:** Two key community issues involve bottled water and expiring water payment credits. Many residents do not trust Flint water, or point-of-use filters, and are fearful that bottled water distribution will be stopped, as the State of Michigan has indicated it hopes to do in the near future. In addition, residents are unhappy that water bill credits that they've received for the past year will end. Bills will increase by 30 to 50 percent based on this roll-back, which begins in March 2017.
- ❑ **Biological Assessments:** Local universities, using state and federal grant funding, have been conducting assessments of legionella bacteria and bacterial influence on point-of-use filters. In summer 2015, during the height of the water crisis, a legionnaires disease outbreak occurred that may have been associated with corrosion of the drinking water system. Wayne State University's legionella assessment has shown that legionella family bacteria are present in water both inside and outside of the Flint drinking water system. The incidence of legionella detection is within the normal expected range of a public water system and follow up assessment work is planned for spring 2017. The University of Michigan conducted an assessment of bacteria influence on point-of-use filters. Preliminary results indicate bacteria can build up in these filters. The university plans to conduct more assessment work in summer 2017. EPA is providing information to the community on its website regarding proper use of filters and ensuring that residents follow manufacturer's recommendations.